

IN THE CLAIMS:

1. (currently amended) A method ~~of switching~~ for regulating refrigerant flow ~~between a~~ in a sealed refrigerant system comprising a fresh food path to a fresh food evaporator in a fresh food compartment and a freezer path to a freezer evaporator in a freezer compartment ~~of a refrigerator~~, wherein the ~~fresh food evaporator is coupled to a first fan and the freezer evaporator is coupled to a second fan~~ fresh food path and the freezer path are in flow communication with a compressor, said method comprising:

providing a ~~three-way~~ three-way valve in flow communication with the compressor for regulating refrigerant flow through ~~with at least three operational positions in flow communication with~~ the fresh food path and the freezer path;

~~switching the three-way valve between the operational positions~~ directing the refrigerant flow by moving the three-way valve to one operational position of a plurality of operational positions, the plurality of operational positions comprising a first operational position for directing the refrigerant flow from the fresh food path to the freezer path and a second operational position for directing the refrigerant flow from the freezer path to the fresh food path, with the three-way valve in the first operational position, a fresh food fan coupled to the fresh food evaporator continues to operate for a first time period and a freezer fan coupled to the freezer evaporator is activated after a second time period, and with the three-way valve in the second operational position, the freezer fan continues to operate for a third time period and the fresh food fan is activated after a fourth time period

~~activating the first fan;~~

~~deactivating the second fan; and~~

~~delivering the refrigerant.~~

2-6. (canceled)

7. (withdrawn) A method of switching refrigerant flow between a path to a freezer evaporator in a freezer compartment and a path to a fresh food evaporator in a fresh food compartment of a refrigerator using a three way valve, said method comprising:

measuring a dt_f between a fresh food compartment temperature and a fresh food evaporator evaporating temperature;

measuring a dt_z between a freezer compartment temperature and a freezer evaporator evaporating temperature;

switching the three way valve between operational positions;

activating a freezer evaporator fan until dt_z reduces to a first predetermined temperature difference;

delaying activation of a fresh food evaporator fan until dt_f increases to a second predetermined temperature difference; and

delivering the refrigerant evaporator.

8. (withdrawn) A method according to Claim 7, wherein using a three way valve comprises using a three way valve with at least two operational positions wherein the three way valve is configured to transition between a first operational position and a second operational position.

9. (withdrawn) A method according to Claim 8, wherein switching the three way valve between operational positions comprises switching the three way valve between the first operational position and the second operational position

10. (withdrawn) A method according to Claim 7, wherein activating a freezer evaporator fan comprises activating the freezer evaporator fan for a first time period.

11. (withdrawn) A method according to Claim 7, wherein activating a fresh food evaporator fan comprises activating the fresh food evaporator fan for a second time period.

12. (withdrawn) A method according to Claim 7, wherein delivering the refrigerant comprises delivering the refrigerant to the freezer evaporator using a compressor.

13. (canceled)

14. (currently amended) A method according to Claim [[13]] 1 wherein providing a three-way valve ~~with at least three operational positions~~ comprises providing a three-way valve wherein the first operational ~~positions~~ position comprises opening a first outlet port and closing a second outlet port such that refrigerant flows through the fresh food ~~evaporator path~~, ~~wherein~~ the second operational position comprises closing the first outlet port and opening the second outlet port such that refrigerant flows through the freezer ~~evaporator path~~, and ~~wherein~~ the third operational position comprises opening both first and second outlet ports such that refrigerant flows through the fresh food ~~evaporator path~~ and the freezer ~~evaporator path~~ in a parallel manner.

15. (currently amended) A refrigerator including a sealed refrigeration system comprising:

a fresh food compartment including a fresh food evaporator positioned therein, a fresh food fan coupled to said fresh food evaporator and operable for cooling said fresh food compartment;

a freezer compartment including a freezer evaporator positioned therein, a freezer fan coupled to said freezer evaporator and operable for cooling said freezer compartment;

a compressor operationally coupled to said fresh food evaporator and said freezer evaporator;

a condenser including a condenser fan coupled to compressor;

a three-way valve coupled to said fresh food and freezer compartments via a fresh food metering device and a freezer metering device, said three-way valve configured to operate between a plurality of operational positions; and

a control logic grid in operational control of said fresh food fan, said freezer fan, said condenser fan, and said compressor, said control logic grid configured, with the three-way valve in a first operational position of said plurality of operational positions, to continue to operate said fresh food fan for a first time period and to activate said freezer fan after a second time period, and with the three-way valve in a second operational position of said plurality of operational positions, to continue to operate said freezer fan for a third time period and to activate said fresh food fan after a fourth time period.

16. (currently amended) A refrigerator according to Claim 15 wherein said three-way valve further comprises ~~a first operational position, a second operational position, and a third operational position~~, said first operational position comprises opening a first outlet port and closing a second outlet port such that refrigerant flows through said fresh food evaporator, ~~wherein~~ said second operational position comprises closing said first outlet port and opening said second outlet port such that refrigerant flows through said freezer evaporator, and ~~wherein~~ said third operational position comprises opening both said first outlet port and said second outlet ports port such that refrigerant flows through said fresh food evaporator and said freezer evaporator in a parallel manner.

17. (currently amended) A refrigerator according to Claim 16 wherein said three-way valve is configured to:

switch to said first operational position when a measured fresh food compartment temperature is not within ~~a range around~~ a fresh food setpoint range and when a measured freezer compartment temperature is within ~~a range around~~ a freezer setpoint range[[,]];

switch to said second operational position when the measured freezer compartment temperature is not within ~~the range around~~ the freezer setpoint range and when the measured fresh food compartment temperature is within ~~the range around~~ the fresh food setpoint range[[,]]; and

switch to said third operational position when the measured freezer compartment temperature is not within the freezer setpoint range and when the measured fresh food compartment temperature ~~are not within a range around the each setpoint respectively such that both the fresh food and the freezer evaporators receive refrigerant~~ is not within the fresh food setpoint range.

18. (currently amended) A refrigerator according to Claim 16 further comprising an accumulator in flow communication with said fresh food evaporator, said freezer evaporator, and said compressor and configured to store excess refrigerant.

19. (new) A method according to Claim 1 wherein said directing the refrigerant flow by moving the three-way valve to one operational position includes the plurality of operational positions further comprising a third operational position for directing the refrigerant flow through the fresh food path and the freezer path.